

## IN THE CLAIMS

1 1. (currently amended) A computer readable medium comprising a plurality of  
2 reservable service (reservable) data entities for implementation in method of building a  
3 transactional service database, wherein at least one of the plurality of reservable data  
4 entities is configured to perform a search for a computer implemented transactional  
5 service, the database including a plurality of data entities, the method comprising:  
6 defining a first data entity describing a reservable service (reservable) as  
7 comprising data representing an indication of indicate a service to be performed[[,]] ;  
8 indicate a time line for the service, the time line indicated service describing a  
9 plurality of time intervals in which the service may be performed over an extended time  
10 period[[,]] ; and  
11 indicate an indication of the time duration required for performing the  
12 service[[;]] , wherein comparing at least one of the plurality of time intervals is capable  
13 of being compared to at least a subset of time lines of the plurality of reservable data  
14 entities[[;]] and updating the data representing updated, wherein the time line of one or  
15 more one of the at least one of the plurality of reservable first data entity entities now  
16 comprises to be comprised of a subset of the plurality of time intervals to facilitate [[the]]  
17 a search of the plurality of reservable data entities in the transactional service database  
18 being limited to the first data entity.

1 2. (currently amended) The computer readable medium method of claim 1, wherein the  
2 at least one of the reservable data entities further comprising comprises data  
3 representing a supplier offering to perform the service.

1 3. (currently amended) The computer readable medium method of claim 1, wherein the  
2 at least one of the reservable data entities is formed as an Extensible Markup Language  
3 (XML) expression.

1 4. (currently amended) The computer readable medium ~~method~~ of claim 1, wherein the  
2 at least one of the reservable data entities further ~~comprising~~ comprises data  
3 representing vertical classification as a particular category or family of related services.

1 5. (currently amended) The computer readable medium ~~method~~ of claim 1, wherein the  
2 at least one of the reservable data entities further ~~comprising~~ comprises data  
3 representing a geographic region in which the service is constrained to be performed.

1 6. (currently amended) The computer readable medium ~~method~~ of claim 1, wherein a  
2 second of the at least one of the plurality of reservable data entities further ~~comprising~~  
3 defining a second data entity describing is configured to describe an engaged reservable  
4 service (engagement) as comprising data representing an indication of the service to be  
5 performed, a date, a time of the time\_line where the time duration is not within the  
6 subset of the time intervals, and a site for the service to be performed, an indication of a  
7 customer having engaged the reservable service, and an indicator that the second of the  
8 at least one of the plurality of data entity entities is an engagement to be consummated  
9 at a future time.

1 7. (currently amended) The computer readable medium ~~method~~ of claim 6, wherein the  
2 engagement is formed as an Extensible Markup Language (XML) expression.

1 8. (currently amended) ~~In a computer implemented system for exchanging a~~  
2 ~~transactional service comprising:~~

3       [[a]] A database configured with a computer-readable medium, the computer-  
4 readable medium comprising a plurality of reservable services (reservables) stored as  
5 positive first data entities, each reservable including data representing an indication of a  
6 service to be performed, a time line for the indicated service describing time intervals in  
7 which the service may be performed over an extended time period, and an indication of  
8 the time duration required for performing the service; [[and]] the database further  
9 configured with a control system configured to update the data associated with at least  
10 one reservable, where the updated data represents a subset of the time intervals in the  
11 time\_line that the indicated service may be performed, and is further configured to  
12 search for and retrieve reservables matching service requests against the subset of the  
13 time intervals, the service requests provided from a source or sources external to the  
14 database.

1 9. (currently amended) The ~~system~~ database of claim 8, wherein reservables are  
2 organized hierarchically by vertical categories, and wherein the control system searches  
3 only in those portions of the database comprising reservables matching the category of  
4 the service requests.

1 10. (currently amended) The ~~system~~ database of claim 8, wherein the database also  
2 comprising is further configured with a computer readable medium comprising  
3 engaged reservable services (engagements) stored as negative second data entities, each  
4 engagement including data representing an indication of a service to be performed, a  
5 date, a time of the time\_line where the time duration of the second data entities is not  
6 within the subset of the time intervals and a site for the service to be performed, and an  
7 indicator that the second entity is an engagement to be consummated at a future time,  
8 wherein the control system forms engagements from reservables following matches  
9 found between the service requests and the reservables.

1 11. (currently amended) The ~~system~~ database of claim 10, wherein the control system  
2 forms the second entities based upon engaged reservables in the database following  
3 formation of an engagement.

1 12. (currently amended) The ~~system~~ database of claim 10, wherein the reservables and  
2 the engagements are implemented as Extensible Markup Language (XML) expressions.

1 13. (currently amended) The ~~system~~ database of claim 12 wherein, the control system  
2 creates supplier-independent reservables from other XML entities in the database,  
3 including resource capabilities and availabilities.

1 14. (currently amended) The ~~system~~ database of claim 13, wherein the control system  
2 creates supplier-specific reservables including supplier identification.

1 15. (currently amended) A computer readable medium have embodied thereon a  
2 program, the program being executable to perform a method for using forming a  
3 reservable service (reservable) data entity in a database of a computer system configured  
4 to provide a search of transactional services, the data entity for describing a reservable  
5 service (reservable), the method comprising:

6       ~~forming the data entity by~~  
7       establishing data representing an indication of a service to be performed[[,]] ;  
8       adding data representing an indication of a time duration for the service[[,]] ;  
9       adding data representing an indication of time intervals over an extended time  
10      line wherein the service may be performed[[,]] ;  
11      adding data representing an indicator that the service is not engaged[[,]] ; and  
12      updating the data representing the indication of the time intervals to form a  
13      subset of the extended time line that excludes the time duration of an engaged  
14      reservable (engagement) such that only the services associated with the subset of the  
15      extended time line is available for the search; [[and]]

16      the computer readable medium further comprising a program executable to  
17 perform a search ~~searching~~ for the data entity associated with the subset of the extended  
18 time line.

1 16. (currently amended) The computer readable medium of claim 15, wherein the  
2 method further comprises ~~method of claim 15 further comprising a step~~ adding an  
3 indication of a supplier offering to perform the service.

1 17. (currently amended) The computer readable medium ~~method~~ of claim 15, wherein  
2 the data entity is formed as an Extensible Markup Language (XML) expression.

1 18. (currently amended) The computer readable medium of claim 15, wherein the  
2 method further comprises ~~method of claim 15 further comprising a step for~~ adding an  
3 indication of vertical classification as a particular category or family of related services.

1 19. (currently amended) The computer readable medium of claim 15, wherein the  
2 method further comprises ~~method of claim 15 further comprising~~ forming another an  
3 engaged reservable service (engagement) data entity in a database, the ~~another~~ data  
4 entity describing an engaged reservable service (engagement), the method comprising  
5 ~~the steps of:~~

6 accepting a request for the service to be performed from a customer external to  
7 the database;

8 searching the database of reservable services (reservables), each reservable  
9 comprising an indication of a service to be performed, an indication of time intervals in  
10 an extended time line wherein the service may be, and an indicator that the service is not  
11 engaged;

12 selecting a reservable capable of fulfilling the request for service;

13 copying information from the reservable to create an engagement specifying a  
14 date, time of the extended timeline where the time duration is not within the subset of  
15 the time intervals and place for the service to be performed; and

16 associating the engagement with the customer making the request, wherein the  
17 engaged reservable for the time duration will not be available to be queried for another  
18 search.

1 20. (currently amended) The computer readable medium ~~method~~ of claim 19, wherein  
2 the reservable is an Extensible Markup Language (XML) expression and the engagement  
3 formed is an XML expression.

1 21. (currently amended) A method of ~~searching~~ matching reservable service

2 (reservable) data entries in a database, the method comprising:

3 receiving a customer request ~~including~~ comprising data representing details of a  
4 desired service, ~~where~~ wherein the data representing details includes a requested time  
5 duration;

6 searching the database for ~~reservables~~ reservable data entries, ~~where~~ wherein  
7 each reservable data entry comprises ~~includes~~ an indication of a service to be performed,  
8 a time line for the service describing time intervals in which the service may be  
9 performed over an extended time period, and an indication of an expected time duration  
10 required for performing the service;

11 matching at least the requested time duration of ~~the details of the customer~~  
12 request against ~~reservables~~ a reservable data entry associated with the time line if no  
13 other reservable data entry associated with the service is yet engaged;

14 matching at least the requested time duration of ~~the details of the customer~~  
15 request against ~~reservables~~ a reservable data entry associated with a subset of the time  
16 line if another reservable data entry associated with the service is engaged; and

17 retrieving matching ~~reservables~~ reservable data entries suitable to satisfy the  
18 customer request.

1 22. (currently amended) The method of claim 21, wherein ~~reservables~~ reservable data

2 entries are organized hierarchically by vertical categories, and wherein, the database is

3 searched only in those portions comprising ~~reservables~~ reservable data entries matching

4 the category of the service requests.

1 23. (currently amended) The method of claim 21 further comprising forming  
2 engagements from ~~reservables~~ reservable data entries following matches found between  
3 the customer request and the ~~reservables~~ reservable data entries, each engagement  
4 ~~including~~ comprising an indication of a service to be performed, a date, a time of the  
5 time\_line where the time duration is not within the subset of the time intervals and a site  
6 for the service to be performed, and an indicator that the entity is an engagement to be  
7 consummated at a future time.

1 24. (currently amended) The method of claim 23 further comprising deleting engaged  
2 ~~reservables~~ reservable data entries from the database, and adding engagements to the  
3 database.

1 25. (currently amended) The method of claim 23 wherein the ~~reservables~~ reservable  
2 data entries and the engagements are implemented as Extensible Markup Language  
3 (XML) expressions.

1 26. (currently amended) The method of claim 25 wherein supplier-independent  
2 ~~reservables~~ reservable data entries are created from other XML entities in the database,  
3 including resource capabilities and availabilities.

1 27. (currently amended) The method of claim 26 wherein supplier-specific ~~reservables~~  
2 reservable data entries are created including supplier identification.

1 28. (currently amended) The reservable data entity of claim 1, further comprising an  
2 indication of a maximum duration of time for performing the service.

1 29. (currently amended) The reservable data entity of claim 1, further comprising an  
2 indication of a minimum duration of time for performing the service.



1 30.-37. (Canceled)

1 38. (currently amended) The ~~method~~ computer-readable medium of claim 1, wherein  
2 ~~the first data entity~~ at least one of the plurality of time intervals and the subset of the  
3 time lines of the plurality of reservable data entities are associated with the same  
4 indicated service to be performed.

1 39. (cancelled)

1 40. (currently amended) The ~~method~~ computer-readable medium of claim 1, wherein  
2 updating the data representing the time\_line further comprises forming the subset of  
3 time intervals by a time\_span algebraic operation.

1 41. (currently amended) The ~~method~~ computer-readable medium of claim 40, wherein  
2 the time\_span algebraic operation is an intersection.

1 42. (currently amended) The ~~method~~ database of claim 8, wherein the control system is  
2 further configured to form the subset of the time intervals by performing a time\_span  
3 algebraic operation.